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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,256	09/12/2003	Stefan Keiser	P/543-107	7780
2352	7590	07/06/2005	EXAMINER	
OSTROLENK FABER GERB & SOFFEN 1180 AVENUE OF THE AMERICAS NEW YORK, NY 100368403			FORD, JOHN K	
			ART UNIT	PAPER NUMBER
			3753	

DATE MAILED: 07/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/661,256

Applicant(s)

KEISER ET AL.

Examiner

John K. Ford

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 4/25/05
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1, 3-8, 10-29 is/are pending in the application.
- 4a) Of the above claim(s) 4-6, 10-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 7, 8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Applicant's reply of April 25, 2005 has been considered. The new limitations added to claim 1 are addressed in the rejections of claims 1, 3, 7 and 8 below.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3, 7 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, applicant claims "at least one chamber-like cavity" (claim 1, line 5) and "the cavity" (claim 1, lines 6 and 7) and "at least two of the chamber-like cavities" (claim 1, line 9). The Examiner is charged with giving their claims their broadest reasonable interpretation. In the broadest reading, is applicant claiming one, two or more than two chamber like cavities? Whatever is being claimed, claim 1 should be internally consistent. Claim 1 is currently vague in this regard.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 7 and 8 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Gerber (USP 3,991,742).

Gerber teaches an upper member 6 and a lower member 4 made of CP

(chlorsulfonated polyethylene) that are thin films with a thickness as small as 5

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mils as disclosed in col. 3, lines 25-48, incorporated here by reference. The CP becomes cross-linked when it is exposed to sunlight as disclosed in col. 4, lines 15-16 and col. 6, lines 42-47, incorporated here by reference. As shown in Figure 18, a plurality of horizontal chamber-like cavities are shown between protrudements 108 (in Figure 18 a total of 10 chamber-like cavities run parallel to one another and they are each interconnected one another by two or three inlets and outlets (depending on the vertical level in Figure 18) to form a single coherent chamber system.

Regarding claim 3, the inlets and outlets are not shown in schematic Figure 18, but must exist for the device to function and are shown in Figure 6, for example, at the top and bottom ends of the sheets.

Regarding claims 7 and 8, CP (chlorsulfonated polyethylene) is polyethylene (a polyolefin).

Claims 1, 3, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Tousignant et al or Giddings and Dodds.

Tousignant discloses PET (polyethylene terephthalate) as forming the flexible layers in his device. In the Figure 5 embodiment, Tousignant discloses two parallel cavities above and below seam 112 that are connected to each other and to an inlet 108 and outlet 110 at the other end.

In Giddings Figure 9 embodiment inlets and outlets are shown at the top and bottom of the plastic film materials (col. 7, lines 12 – 14). Vertical seams divide the cavity into eight parallel chamber-like cavities.

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To have used a cross-linked the polyethylene material in the films of Tousignant or Giddings for the reasons taught by Dodds at col. 6, line 66 – col. 7, line 2, incorporated here by reference (i.e. the advantages to cross-linked polyethylene are are: strong, tough, tear [resistant], abrasion [resistant] and scale resistant and extremely thin for superior heat transfer properties), would have been obvious to one of ordinary skill in the art to take advantage of any of these desirable properties of cross-linked polyethylene.

Applicant's amendment (in combining claims 1, 2 and 9 in a new combination, not previously claimed) necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to John K. Ford at telephone number 571-272-4911.



**John K. Ford**  
**Primary Examiner**